AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computer system to provide one or more product selections to a user in accordance with an analysis of user needs, the computer system comprising:

a database ~~to store pre-generated product configurations and~~ storing product configuration information, wherein the product configuration information comprises product ~~features~~ attribute information and pre-generated product configurations~~, and product rules governing allowable combinations of the product features~~;

a memory;

a processor coupled to the memory and the database;

a data receiving module, stored in the memory, to receive product related data from the user through a communication link coupled between a data processing system of the user and the data receiving module, wherein the product related data is a member of a group of information types comprising product attribute information and product identifier information;

a needs analysis module, stored in the memory, to process the received product related data and to determine which type of information is included in the received product related data;

a filter service module, stored in the memory, to process product attribute information received by the needs analysis module~~, if the product related data is attribute information, the received product related data~~ in accordance with the product configuration information stored in the database ~~and~~ in order to identify one or more of the pre-generated product configurations stored in the database that meet requirements of the received product attribute information;

a configuration service module, stored in the memory, to process product identifier information received by the needs analysis module to identify one or more of the pre-generated product configurations stored in the database that corresponds to the received product related data~~, if the product related data is product identifier information~~; and

a presentation module, stored in the memory, to provide ~~each identified pre-generated product configuration and~~ each identified pre-generated product configuration to the user via the communication link.

2. (Previously Presented) The computer system of claim 1 further comprising:

a software configuration engine stored in the memory to generate the pre-generated product configurations.

3. (Currently Amended) The computer system of claim 1 wherein the data receiving module is further configured to receive data indicating a user selected product, wherein the selected product corresponds to one of the identified pre-generated product configurations, and the data receiving module is further configured to receive product configuration selections from the user to further configure the selected product, the computer system further comprising:

a software configuration engine, stored in the memory, to generate configured product data corresponding to the product configuration selections associated with the selected product and in accordance with the product configuration information; and

wherein the presentation module is further configured to present the configured product data to the user via the communication link.

4. (Currently Amended) The computer system of claim ~~3~~ 1, wherein

said filter service module is further configured to provide a product identifier to said needs analysis module in response to attribute information received from said needs analysis module,

said product identifier identifies a pre-generated product configuration, and

said attribute information is an attribute of said pre-generated product configuration.

5. (Previously Presented) The computer system of claim 4, wherein

said filter service module is further configured to use said attribute information to retrieve said product identifier from said database.

6. (Currently Amended) The computer system of claim 1, wherein said

database contains product identifier information that identifies each pre-generated product configuration and reference data that links the product attribute information to a pre-generated product configuration.

7. (Currently Amended) The computer system of claim 6, wherein said database comprises:

a configuration table ~~to store~~ storing the pre-generated product configurations; and

an attribute table storing the product attribute information.

8. (Currently Amended) The computer system of claim 7, wherein said configuration table contains said product identifier information and ~~said attribute table contains said attribute information~~.

9. (Currently Amended) The computer system of claim 7, wherein

said attribute table comprises an attribute record comprising an attribute field containing said attribute information, and an intersection field containing a reference to ~~said configuration record~~ at least one of the pre-generated product configurations, and

said configuration table comprises a configuration record comprising a configuration field containing said pre-generated product configurations~~,~~ and an identifier field containing said product identifier information.

10. (Currently Amended) The computer system of claim 9, wherein

each pre-generated product configuration describes a configuration of a product that is allowable product configurations in accordance with product rules governing allowable combinations of product attributes,

said attribute information describes an attribute of said product, and

said pre-generated product configuration of said product includes said attribute of said product.

11. (Currently Amended) The computer system of claim 9, wherein

said needs analysis module is configured to access said product configuration information ~~by virtue of said needs analysis module being configured to supply said attribute information to~~ through said filter service module~~, and~~

~~said filter service module is configured to access said database by virtue of being configured to access said database using said attribute information~~.

12. (Previously Presented) The computer system of claim 9, wherein said reference allows said filter service module to access said configuration record by virtue of said filter service module being configured to access said attribute record using said attribute information.

13. (Currently Amended) The computer system of claim 1, wherein said needs analysis module is configured to permit identification of ~~a~~ at least one of the pre-generated product ~~configuration~~ configurations based on product identifier information.

14. Canceled.

15. (Previously Presented) The computer system of claim 1, wherein said configuration service module is configured to provide a configuration list to said needs analysis module in response to a product identifier received from said needs analysis module.

16. (Previously Presented) The computer system of claim 15, wherein said configuration list is a list of available features of said product.

17. (Previously Presented) The computer system of claim 15, wherein said configuration list is a list of configurations of said product.

18. (Previously Presented) The computer system of claim 15, wherein said configuration service is configured to use said product identifier to generate said configuration list from information stored in said database.

19. (Currently Amended) The computer system of claim ~~14~~ 1, wherein said database contains product identifier information.

20. (Previously Presented) The computer system of claim 19, wherein said database comprises:

a configuration table containing said product identifier information and said configuration information.

21. (Currently Amended) The computer system of claim 20, wherein said needs analysis module is configured to access said pre-generated product configuration information ~~by virtue of said needs analysis module being configured to supply~~ through said product identifier information to said configuration service module, and

said configuration service module is configured to access said database by virtue of being configured to access said database using said product identifier information.

22. (Currently Amended) The computer system of claim 20, wherein said configuration table comprises a configuration record comprising

a configuration field containing said pre-generated product ~~configuration information~~ configurations, and

an identifier field containing said product identifier information.

23. (Previously Presented) The computer system of claim 22, wherein said pre-generated product ~~configuration information~~ configurations describes ~~a configuration of said product~~ describes a product previously configured and saved by the user, and

said product identifier information identifies said configuration of said product.

24. (Currently amended) A computer program product encoded in a computer readable medium, the computer program product comprising code executable on a computer system to provide one or more product selections to a user in accordance with an analysis of user needs, the code comprising instructions to:

receive product related data from the user through a communication link coupled between a data processing system of the user and the computer system, wherein the product related data is a member of a group of information types comprising attribute information and product identifier information;

process the received product related data;

determine which type of information is included in the received product related data;

process, if the product related data is attribute information, the received product related data in accordance with product configuration information ~~and~~ in order to identify

one or more of the pre-generated product configurations stored in a database that meet requirements of the received attribute information~~, wherein the product configuration information comprises product features and product rules governing allowable combinations of the product features~~;

identify one or more of the pre-generated product configurations that corresponds to the received product related data, if the product related data is product identifier information; and

provide ~~each identified product configuration and~~ each identified pre-generated product configuration to the user via the communication link.

25. (Previously Presented) The computer program product of claim 24, wherein the code further comprises code to permit identification of a product based on attribute information.

26. (Currently amended) The computer program product of claim 24, wherein the code further comprises code to:

receive data indicating a user selected product, wherein the selected product corresponds to one of the identified pre-generated product configurations;

receive product configuration selections from the user to further configure the selected product;

generate configured product data corresponding to the product configuration selections associated with the selected product and in accordance with ~~the product configuration information~~ product rules stored in a memory that govern allowable combinations of the product features; and

provide the configured product data to the user via the communication link.

27. (Currently Amended) The computer program product of claim 26, wherein the code further comprises code to:

provide a product identifier to said needs analysis module in response to attribute information,

said product identifier identifies ~~a~~ at least one of the pre-generated product configuration, and

said attribute information is an attribute of said product.

28. (Previously Presented) The computer program product of claim 27, wherein the code further comprises code to:

use said attribute information to retrieve said product identifier from said database.

29. (Currently Amended) The computer program product of claim 26 further comprises a data structure, the data structure comprising information resident in ~~a~~ said database, the information comprising:

product identifier information associated with each pre-generated product configuration and reference data that links the product attribute information to a pre-generated product configuration.

30. (Currently Amended) The computer program product of claim 29, wherein said data structure further comprises:

a configuration table ~~to store~~ storing the pre-generated product configurations, and

an attribute table to store the product attribute information.

31. (Previously Presented) The computer program product of claim 30, wherein

said configuration table contains said product identifier information said attribute table contains said attribute information.

32. (Currently Amended) The computer program product of claim 30, wherein

said attribute table comprises an attribute record comprising an attribute field containing said attribute information, and an intersection field containing a reference to ~~said configuration record~~ at least one of the pre-generated product configurations, and

said configuration table comprises a configuration record comprising a configuration field containing said pre-generated product configurations, and an identifier field containing said product identifier information.

33. (Currently Amended) The computer program product of claim 32, wherein each pre-generated product configuration describes a configuration of a product that

is allowable product configurations in accordance with product rules governing allowable combinations of product attributes;

said attribute information describes an attribute of said product, and

said pre-generated product configuration of said product includes said attribute of said product.

34. (Currently Amended) The computer program product of claim 32, wherein the code ~~is further configured~~ further comprises code to:

access said pre-generated product configuration identifier information ~~product configuration information by virtue of supplying~~ using said attribute information ~~to said filter service, and~~

~~access said database by virtue of being configured to access said database using said attribute information~~.

35. (Previously Presented) The computer program product of claim 32, wherein

said reference allows the code to access said configuration record by accessing said attribute record using said attribute information.

36. Canceled.

37. (Previously Presented) The computer program product of claim 24, wherein said code further comprises code to permit identification of a product configuration based on product identifier information.

38. Canceled.

39. (Currently Amended) The computer program product of claim 24, wherein the code further comprises a needs analysis module.

40. (Previously Presented) The computer program product of claim 39, wherein said code further comprises code to:

provide a configuration list to said needs analysis module in response to a product identifier received from said needs analysis module.

41. (Previously Presented) The computer program product of claim 40, wherein

said configuration list is a list of available features of said product.

42. (Previously Presented) The computer program product of claim 40, wherein said configuration list is a list of configurations of said product.

43. (Previously Presented) The computer program product of claim 40, wherein said code further comprises code to:

use said product identifier to generate said configuration list from information stored in said database.

44. (Canceled).

45. (Previously Presented) The computer program product of claim 29 , wherein said data structure further comprises:

a configuration table containing said product identifier information.

46. (Previously Presented) The computer program product of claim 45, wherein said code further comprises code to:

access said configuration information by virtue of supplying said product identifier information to a configuration service, and

access said database by virtue of being configured to access said database using said product identifier information.

47. (Previously Presented) The computer program product of claim 45, wherein

said configuration table comprises a configuration record comprising a configuration field containing said pre-generated product configurations, and an identifier field containing said product identifier information.

48. (Currently Amended) The computer program product of claim 47, wherein

said configuration information describes a configuration of said product <u>that is allowable</u>

product configurations in accordance with product rules governing allowable combinations of product attributes, and

said product identifier information identifies said pre-generated configuration of said product.

49. (Canceled).

50. (Canceled).

51. (Currently Amended) A method to provide one or more product selections to a user in accordance with an analysis of user needs, the method comprising:

receiving product related data from the user through a communication link coupled between a data processing system of the user and a computer system, wherein the product related data is a member of a group of information types comprising attribute information and product identifier information;

processing the received product related data using resources of the computer system;

determining which type of information is included in the received product related data;

processing, if the product related data is attribute information, the received product related data in accordance with product configuration information ~~and~~ in order to identify one or more of the pre-generated product configurations stored in a database that meet requirements of the received attribute information~~, wherein the product configuration information comprises product features and product rules governing allowable combinations of the product features~~;

identifying one or more of pre-generated product configurations that corresponds to the received product related data, if the product related data is product identifier information; and

providing ~~each identified product configuration and~~ each identified pre-generated product configuration to the user via the communication link.

52. (Currently Amended) The method of claim 51, wherein

said product identifier information ~~is associated with a product configuration~~ identifies pre-generated product configurations, and

said pre-generated product configuration represents a product having an attribute

represented in said attribute information.

53. (Previously Presented) The method of claim 52, further comprising:
causing a needs analysis module to provide said attribute information to a filter service; and
causing said filter service to return said product identifier information to said needs analysis module.

54. (Currently Amended) The method of claim 51, further comprising:
querying a database of said computer system, wherein querying said database comprises:
accessing an attribute table of said database using said attribute information;
identifying at least one product identifier information in a database record comprising the product identifier and said attribute information; and
accessing said product identifier information in a configuration table of said database ~~using a reference in said attribute table associated with a record of said attribute table accessed using said attribute~~ to identify a pre-generated product configuration associated with said attribute information.

55. (Currently Amended) The method of claim 54, wherein
said product identifier information is associated with ~~a~~ said pre-generated product ~~configuration~~ configurations, and
each of said pre-generated product ~~configuration~~ configurations represents a product having said attribute.

56. (Currently Amended) The method of claim 55, wherein
said configuration table comprises said pre-generated product ~~configuration~~ configurations.

57. (Previously Presented) The method of claim 51 further comprising:
providing said product identifier information to a configuration service;
identifying said pre-generated product configuration corresponding to said product identifier information by causing said configuration service to query a database using said product identifier information; and

causing said configuration service to return said identified pre-generated product configuration.

58. (Previously Presented) The method of claim 57, wherein said product identifier information is associated with a pre-generated product configuration in said database.

59. (Previously Presented) The method of claim 58, further comprising:
causing a needs analysis module to provide said product identifier information to said configuration service; and
causing said configuration service to return said pre-generated product configuration to said needs analysis module.

60. (Previously Presented) The method of claim 57, wherein said querying said database comprises:
accessing a configuration table of said database using said product identifier information to identify said pre-generated product configuration.

61. (Previously Presented) The method of claim 60, wherein
said pre-generated product configuration is associated with said product identifier information.

62. (Currently Amended) The method of claim 51 further comprising:
receiving data indicating a user selected product, wherein the selected product corresponds to one of the identified pre-generated product configurations;
receiving product configuration selections from the user to further configure the selected product;
generating configured product data corresponding to the product configuration selections associated with the selected product and in accordance with the product configuration information; and
providing the configured product data to the user via the communication link.

63. (Cancelled)

64. (Previously Presented) The method of claim 51, wherein said product related data includes data related to a vehicle.

65. (Previously Presented) The method of claim 64, wherein said product configuration selections comprise a make of said vehicle.

66. (Previously Presented) The method of claim 64, wherein said product configuration selections comprise a model of said vehicle.

67. (Previously Presented) The method of claim 64, wherein said product configuration selections comprise a trim level of said vehicle.

68. (Previously Presented) The method of claim 64, wherein said product configuration selections comprise an equipment level of said vehicle.

69. (Currently Amended) The method of claim 64, wherein said product configuration selections comprise ~~is~~ one of a price range, a vehicle type, an engine type, a fuel economy, an interior feature and a safety feature.

70. (Currently Amended) An apparatus to provide one or more product selections to a user in accordance with an analysis of user needs, the apparatus comprising:

means for receiving product related data from the user through a communication link coupled between a data processing system of the user and a computer system, wherein the product related data is a member of a group of information types comprising attribute information and product identifier information;

means for processing the received product related data using resources of the computer system;

means for determining which type of information is included in the received product related data;

means for processing, if the product related data is attribute information, the received product related data in accordance with product configuration information ~~and~~ in order to identify one or more of the pre-generated product configurations stored in a database that meet requirements of the received attribute information~~, wherein~~

~~the product configuration information comprises product features and product rules governing allowable combinations of the product features~~;

means for identifying one or more of pre-generated product configurations that corresponds to the received product related data, if the product related data is product identifier information; and

means for providing ~~each identified product configuration and~~ each identified pre-generated product configuration to the user via the communication link.

71. (Currently Amended) The apparatus of claim 70 further comprising:

means for receiving data indicating a user selected product, wherein the selected product corresponds to one of the identified pre-generated product configurations;

means for receiving product configuration selections from the user to further configure the selected product;

means for generating configured product data corresponding to the product configuration selections associated with the selected product and in accordance with the product configuration information; and

means for providing the configured product data to the user via the communication link.

72. (Previously Presented) The apparatus of claim 70 wherein the product related data includes data related to a vehicle.

73. (Previously Presented) The computer system of claim 1 wherein the product related data includes data related to a vehicle.

74. (Previously Presented) The computer program product of claim 24 wherein the product related data includes data related to a vehicle.